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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,127	02/21/2002	Douglas G. Clark	T8-466286US	6792

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EXAMINER

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,127

Applicant(s)

CLARK ET AL.

Examiner

John J. Zimmerman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 11, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

SECOND OFFICE ACTION

Amendments

1. This Office Action is in response to amendment and remarks received March 8, 2004.

Claims 1-15 are pending in this application.

Drawings

2. A review of the specification shows that Figure 1 represents a "conventional, prior art" lead strip (e.g. see page 8, lines 19-20 of the specification). Therefore, Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 11 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend upon another multiple dependent claim. See MPEP § 608.01(n). Claim 11 is a multiple dependent claim that can depend on multiple dependent claims 6 and 7. Accordingly, claim 11 has not been further treated on the merits.

Claim Rejections - 35 USC §103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McWhinnie (U.S. Patent 4,332,629) in view of applicant's disclosure of the prior art and further in view of Runevall (U.S. Patent 3,693,394).

6. McWhinnie discloses extruding lead alloy strips, cooling the strips with jets of water, winding the strips on a roll under low tension, and slitting and expanding the strips into a mesh (e.g. see column 3, line 41 - column 2, line 60)). Although McWhinnie does not specifically disclose the grain size of his specific examples or the tensile strength and high elongation (e.g. see applicants claim 11), the extrusion and rapid cooling process of McWhinnie is so similar to that claimed that it would very likely produce grain sizes and properties in applicant's claimed range. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior

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art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). Although applicant discusses in the applicant's specification that the process of McWhinnie has limitations (e.g. see applicant's Description of the Related Art; e.g. at page 2, lines 15-21), applicant's claims do not distinguish over the extrusion process and the rapid cooling step of McWhinnie. McWhinnie may differ from the claims in that McWhinnie instructs that "the strips were slit and expanded to mesh form in conventional manner" (e.g. see column 4, lines 50-54) but does not elaborate on the details of the slitting and expansion means. The applicant, however, clearly shows that the slitting and expansion means in claims 6, 7, 9 and 10 are conventional slitting and expansion means in the art for making meshes (e.g. see page 3, lines 1-9, of the applicant's specification). Since McWhinnie discloses to use a conventional slitting and expansion means, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the conventional slitting and expansion means disclosed by applicant as prior art, because these processes would be the types of processes recognized in the art as suitable conventional means for making McWhinnie's expanded mesh. Regarding claim 2, it is well recognized that extrusion process can produce articles of various cross sections other than planar strips depending on the configuration of the extrusion die. There appears to be no patentable distinction in initially producing other cross sections configurations that are subsequently simply shaped into planar strips since the end product would be essentially the same. While McWhinnie appears to use a batch type extruder process in his example (e.g. see column 3, line 47 - column 4, line 9) and may not disclose a process for "continuously" producing a lead alloy strip (e.g. see claim 1, line 1), it is fairly well established in the manufacturing art that continuous processes are obvious alternative processes to batch processes

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since they are often more efficient and cost effective methods of producing large amounts of goods. Runevall is applied to show that the use of screw type continuous lead extruders is well known in the art. Runevall discloses a particularly efficient continuous screw press extruder (e.g. see column 2, lines 13-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a continuous extrusion press for producing the lead alloy strip of McWhinnie since continuous lead extruders are known in the prior art and continuous processes are generally capable of greater efficiency, volume and cost effectiveness. One of ordinary skill in the art would understand that the hot extruded lead product of McWhinnie would need to be cooled (e.g. see column 4, lines 9-26) regardless of the press type. Also, determining the temperature range necessary to the extrusion of different lead alloys (e.g. see claim 5) would be well within the level of ordinary skill in the art and would be understood by the skilled artisan to be necessary to the operation of the extruder.

7. Regarding the use of applicant's admitted prior art in the rejection, it is axiomatic that consideration of the prior art cited by the examiner must, of necessity, include consideration of the admitted state of the art found in applicant's specification, *In re Davis*, 305 F.2d 501, 134 USPQ 256 (CCPA 1962); *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986). Admitted knowledge in the prior art may be used in determining patentability of the claimed subject matter, *In re Nomiya*, 509 F.2d 566, 184 USPQ 607 (CCPA 1975).

Allowable Subject Matter

8. Claims 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not disclose or make obvious the use of the specific alloys required by claims 14 and 15 in the claimed process.

Response to Arguments

9. Applicant's arguments, received March 8, 2004, with respect to claims have been considered but are moot in view of the new grounds of rejection.

10. Applicant's amendments to the claims have overcome the prior rejection of claims 1, 3 and 4 under 35 U.S.C. 102(b) as being anticipated by Ebdon (U.S. Patent 3,189,989) and the prior rejection of claims 1, 3 and 4 under 35 U.S.C. 102(b) as being anticipated by Hofmann (Chem. Abs. "Creep Behavior of Lead and Lead Alloys in Practical Application", Freiburger Forschungshefte 1964).

11. Applicant argues that McWhinnie is described in applicant's specification to produce a lead-antimony strip including negative corrosion characteristics and undesired grid growth due to extrusion by batch ram extrusion at a low speed of 6-10 ft/min. The examiner has not found any actual data or tests in the applicant's specification confirming applicant's observations on McWhinnie and therefore can give the observations little weight. Applicant has amended the claims to now require a continuous method of producing lead alloy strip. The examiner notes,

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however, that it is fairly well established in the manufacturing art that continuous processes are obvious alternative processes to batch processes since they are often more efficient and cost effective methods of producing large amounts of goods. Runevall (U.S. Patent 3,693,394) has been applied to show that the use of screw type continuous lead extruders is well known in the art. Runevall discloses a particularly efficient continuous screw press extruder (e.g. see column 2, lines 13-67) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a continuous extrusion press for producing the lead alloy strip of McWhinnie since continuous lead extruders are known in the prior art and continuous processes are generally capable of greater efficiency, volume and cost effectiveness. One of ordinary skill in the art would understand that the hot extruded lead product of McWhinnie would need to be cooled (e.g. see column 4, lines 9-26) regardless of whether a batch or continuous press is used.

Conclusion

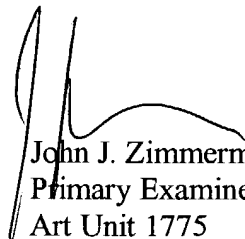
12. Applicant's amendment adding limitations to a method of "continuously" producing a lead alloy strip necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated

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from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Zimmerman
Primary Examiner
Art Unit 1775

jjz
May 10, 2004